

PROPERTY PLANNING COMMON ELEMENTS

COMPONENTS OF MASTER PLANS

HABITATS AND THEIR MANAGEMENT

Wetland Shrub – Dogwood

Description

Wetland shrub communities are wetland sites with <10% trees and 50% or more persistent shrubs. Dogwood shrub wetlands have greater than 50% dogwoods. These communities are minerotrophic and dominated by tall shrubs, especially red-osier dogwood or silky dogwood, with white meadowsweet, various willows, ninebark, swamp rose, and currants and gooseberries as shrub associates. The flora is similar to that found in alder shrub wetlands and tussock-type sedge meadows. Canada bluejoint grass often is very common, and other characteristic species include orange jewelweed, giant goldenrod, marsh violet, tall meadow-rue, American water-horehound, spotted Joe-Pye-weed, marsh fern, and sensitive fern. Sites with pools or spring runs may support broad-leaved cat-tail, arrowheads, American water-plantain, and bulrushes, while sites with springs and seepages may have great angelica, low-water parsnip, swamp saxifrage, American golden saxifrage, and golden ragwort.

Dogwood shrub wetlands are common and widespread in southern Wisconsin and occur at scattered locations in the north. They often occur in bands around lakes or ponds, on the margins of river floodplains, or, more extensively, in glacial lakebeds, and are often associated with cat-tail marshes. The dogwood shrub wetland type occupies areas that are transitional between open wetlands such as wet prairie, fen, or sedge meadow, and forested wetlands such as bottomland or swamp hardwoods. It can persist at a given site for long periods of time if natural hydrologic cycles are maintained.

Historically, dogwood shrub wetlands were an integral part of prairie-savanna landscapes throughout southern Wisconsin, though they also occurred in wetlands within more forested regions (the landscape matrix around this type in the north typically was upland forest). Currently, these shrub wetlands remain quite common and have fared considerably better than many other native wetland types, although their abundance and distribution has shifted somewhat. After Euro-American settlement, drainage, marsh hay mowing, and grazing likely had a negative effect on dogwood shrub wetlands, while clearing of conifer swamps likely produced more of this habitat. Drainage of marshes and sedge meadows, fire suppression, and cessation of marsh hay mowing in lowland meadows have allowed dogwood shrub wetlands to increase in some areas, such that they now occupy many sites that formerly supported extensive marsh, sedge meadow, wet prairie, and fen vegetation. However, these wet, shrubby thickets do comprise an important native wetland type that supports many native species and which should be protected, managed, and restored at appropriate locations.

Dogwood shrub wetlands are a critical winter habitat for ring-necked pheasants in Wisconsin.

Ecological Landscape Opportunities

Ecological Landscape	Opportunity*
Central Sand Hills	M
Central Sand Plains	M
Northern Lake Michigan Coastal	M



Ecological Landscape	Opportunity*
Southeast Glacial Plains	M
Western Coulee and Ridges	M
Central Lake Michigan Coastal	I
Forest Transition	I
North Central Forest	I
Northern Highland	I
Southern Lake Michigan Coastal	I
Superior Coastal Plain	I
Northeast Sands	P
Northwest Lowlands	P
Northwest Sands	P
Southwest Savanna	P
Western Prairie	P

*M = Major; major opportunity exists in this Landscape; many significant occurrences are recorded, or restorations likely to be successful.

I = Important; several occurrences important to maintaining the community in the state occur in this Landscape.

P = Present; community is present in the Landscape but better opportunity exists elsewhere.

Rare Species

Many Species of Greatest Conservation Need (SGCN) are associated with dogwood shrub wetlands based on the findings in [Wisconsin's 2015 Wildlife Action Plan](#). To learn more, visit the [Wetland communities page](#) and click on "Shrub-carr" under "Explore non-forested wetlands".

Threats

- Altered hydrology can destroy shrub wetlands or degrade their habitat quality.
- Non-native invasive plants such as reed canary grass and glossy buckthorn are a threat to dogwood shrub wetlands.
- Marsh hay mowing and grazing in shrub wetlands can degrade habitat quality (alter or obliterate native plants, lead to an increase in weedy generalist species, and facilitate spread of exotic plants, compact soil) and increase stream sediment and nutrient loads.
- Shrub wetlands are threatened by excessive nutrient and sediment inputs where they occur adjacent to agricultural lands.
- Shrub wetlands can succeed to forest where natural disturbance (e.g., fire) or hydrologic regimes have been altered.

Management Techniques

- Prescribed fire
- Mowing/brushing



- Pesticide treatments

Management Prescriptions

- When deciding on a management approach, consider whether dogwood shrub wetland stands at a site are of natural origin or are a result of factors such as drainage or fire suppression that have allowed shrub wetlands to increase at the expense of rarer wetland or prairie communities like fen, sedge meadow, or wet prairie. Dogwood shrub wetlands can persist and be relatively self-sustaining long-term in sites with stable/natural hydrologic cycles, but active management may be required to maintain them and/or to reverse or prevent their encroachment into adjacent open communities in the absence of natural disturbances (wildfires, natural hydrologic fluctuations). The decision of whether to maintain dogwood shrub wetlands on successional sites or sites with altered/compromised hydrology should be made after considering the landscape context of the site, suitability of the site to support other native communities and likelihood of reestablishment, and the need to prevent any further deterioration of the site.
- Maintain site hydrology; restore where appropriate and feasible.
- Wherever possible, manage dogwood shrub wetlands as part of a complex of interconnected, related habitats (e.g., bottomland or swamp hardwoods, wet prairie, sedge meadow, fen, emergent marsh, etc.).
- Use prescribed fire, tree cutting, chemical treatments, and mowing to maintain dogwood shrub wetlands.

